

# Revision of the Genus *Pandanus* Stickman, Part 30 The New Section *Marginata* from Papua

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PAPUA and its offshore islands are rich in species of *Pandanus*, many of which have been made known through the collections of L. J. Brass. The following is one of these, here described as a new species. It is in the affinity of the section *Microstigma*, but because of significant difference in the stigma, it is published below as the basis of a new section.

## Section *Marginata*, sect. nov. (subgen. *Lophostigma*)

DIAGNOSIS: Drupis 1-carpelatis, stigmatibus terminalibus elevatis horizontalibus hippocrepiformibus, sinu stigmatis late marginatis, syncarpio solitario subcylindrico, plantis masculis incognitis.

Drupe 1-celled; stigma terminal, elevated, horizontal, horseshoe-shaped owing to the broad, hard stylar band of tissue on either side of the stigmatic sinus; syncarp solitary, subcylindric; staminate plants unknown.

HOLOTYPE: *Pandanus marginatus* St. John.

To insert this in the "Key to the Sections" published in Part 1 of this series (Pacific Sci. 14(3):225), for the first C read:

- C. Stigma flush, papillose,
  - y. Stigmatic sinus a mere crease; stamens umbellate at apex of column . . . *Microstigma*
  - y. Stigmatic sinus with broad stylar margin on either side, forming a horseshoe-shaped stigma; staminate plants unknown . . . . . *Marginata*

*Pandanus marginatus* sp. nov. (sect. *Marginata*)  
Fig. 275

DIAGNOSIS HOLOTYPI: Planta 2.5–4 m alta, "caule plerumque eramoso, radicibus fulturosis paucis brevibus," foliis 1.9–2.26 (+0.3–0.5?) m longis in medio 4 cm latis supra basem 3.5 cm latis subtiliter coriaceis

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supra viridibus infra palliditer viridibus et ad basem glaucis U-sulcatis 2-plicatis in sectione mediali cum 42 nervis parallelis secundariis nervis tertiis in parte  $\frac{1}{2}$  ultima semivisibilibus et reticulis oblongis formantibus, lamina paene ligulata sed in parte  $\frac{1}{6}$  ultima ad apicem gracilem diminuenti (apex deest), basi inermi pallida ex 3–6 cm marginibus cum aculeis 1–1.8 mm longis 3–6 mm separatis rectis subulatis ad arcuati-subulatis adscendentibus pallidis vel cum apicibus minime brunneis, midnervo infra in parte  $\frac{1}{6}$  infera inermi, in sectione mediali marginibus cum aculeis 1.3–1.5 mm longis 4–8 mm separatis subulatis valde adscendentibus pallidis cum apicibus brunneis, midnervo infra cum aculeis 0.7–1 mm longis 4–6 mm separatis arcuati-subulatis valde adscendentibus stramineis, infrutescentia cum syncarpio solitario pendenti subcylindrico aurantiaci-rubro, syncarpio 27 cm longo 7 cm diametro, drupis 17–18 mm longis 6–10 mm latis 5–7 mm crassis elliptico-oblongis 4–6-angulosis parte  $\frac{1}{4}$  supra libera apice obtuso, pileo 3–4 mm alto laevi lucido inter angulas contrahenti, stigmatibus 2–2.5 mm longo elevato plus minusve horizontali brunneo papilloso hippocrepiformi ex lineis duobus parallelis pallidis stylaribus invaginatibus et sinu centrali adjacenti, endocarpio centrali ellipsoideo osseoso obscure rubri-brunneo lateribus 1–1.2 mm crassis intra laevibus lucidis, semine 6–7 mm longo, mesocarpio apicali cum fibris marginalibus fortibus eis in apice convergentibus et cum membranis transversis paucis brunneis, mesocarpio basali fibroso et carnoso.

DIAGNOSIS OF HOLOTYPE: Plant 2.5–4 m tall; "stem usually unbranched; prop roots few, short"; leaves 1.9 (+0.3–0.5?) m long, 4 cm wide near the middle, 3.5 cm wide near the base, thin coriaceous, green above, pale green below and glaucous near the base, U-sulcate, 2-pleated, at midsection with 42 parallel secondary veins in each half, the tertiary cross veins faintly seen in outer half forming oblong meshes, blade almost ligulate, but in outer  $\frac{1}{6}$  tapering toward the slender apex (this lost in ours), base unarmed, pale; beginning at 3–6 cm up the margins with prickles 1–1.8 mm long, 3–6 mm apart, straight subulate to arcuate subulate, ascending, pale or with faint brown tips; the midrib below unarmed for the lower  $\frac{1}{6}$ ; at midsection the margins with prickles 1.3–1.5 mm long, 4–8 mm apart, subulate,

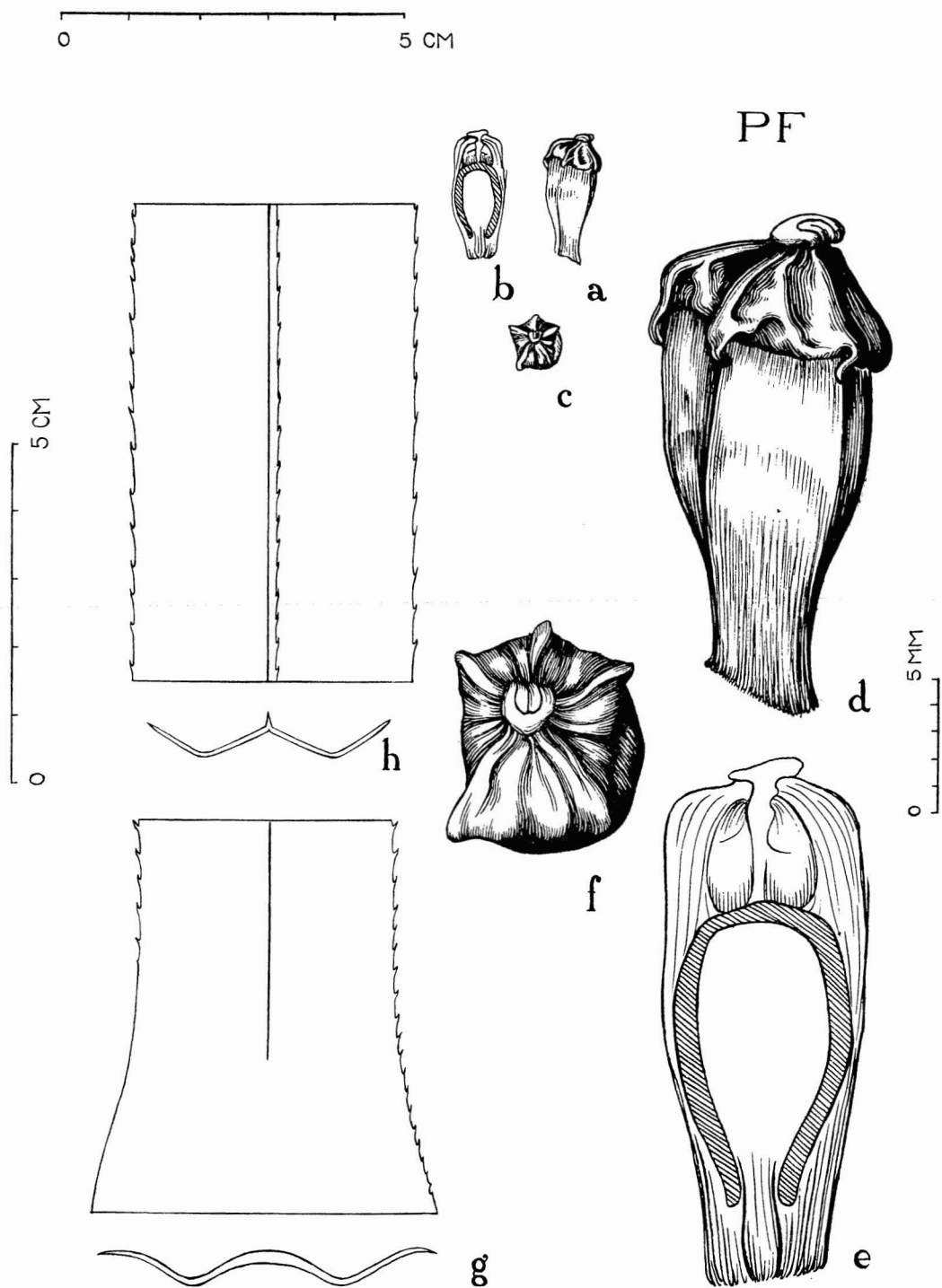


FIG. 275. *Pandanus marginatus* St. John, from the holotype. *a*, Drupe, lateral view,  $\times 1$ ; *b*, drupe, longitudinal median section,  $\times 1$ ; *c*, drupe, apical view,  $\times 1$ ; *d*, drupe, lateral view,  $\times 4$ ; *e*, drupe, longitudinal median section,  $\times 4$ ; *f*, drupe, apical view,  $\times 4$ ; *g*, leaf base, lower side,  $\times 1$ ; *h*, leaf middle, lower side,  $\times 1$ .

strongly ascending, pale with brown tips; the nearby midrib below with prickles 0.7–1 mm long, 4–6 mm apart, arcuate subulate, strongly ascending, stramineous; infructescence with a solitary, pendent, orange-red, subcylindric syncarp, this 27 cm long, 7 cm in diameter; drupes 17–18 mm long, 6–10 mm wide, 5–7 mm thick, elliptic-oblong, 4–6-angled, upper  $\frac{1}{4}$  free, apex obtuse to the base of the stigma; pileus 3–4 mm high, smooth, shining, shrinking between the angles; stigma 2–2.5 mm long, elevated, more or less horizontal, brown, papillose, horseshoe-shaped because of the two parallel bands of hard, pale, stylar tissue that invaginate and border the central sinus; endocarp central, ellipsoid, bony, dark reddish-brown, the walls 1–1.2 mm thick, within smooth, shining; seed 6–7 mm long; apical mesocarp with strong marginal fibers converging to the apex, and within a few brown, transverse membranes; basal mesocarp fibrous and fleshy.

HOLOTYPE: Papua, D'Entrecasteaux Is., Goodenough I., Bolu Bolu, rainforest undergrowth, 20 m alt, 28 Sept. 1953, *L. J. Brass* 24,406 (K). Isotype (A)!

SPECIMENS EXAMINED: Papua, Milne Bay Dist., Dabora, Cape Vogel Peninsula, rain forest, 30–60 m alt, 8–10 April 1953, *L. J. Brass* 21,906 (K).

EXPANDED DESCRIPTION: Leaves over 2 m long, persisting from apex to base of stem, at midsection with 47 parallel secondary veins in each half, near the apex the pleats serrulate above; immature syncarp 6.5 cm in diameter, 3-angled, pink.

DISCUSSION: The new epithet is the Latin adjective *marginatus*, margined, and is given with application to the doubly margined stylar sinus.